

09/473,080

1-3. (CANCELED)

4. (CURRENTLY AMENDED) A cable broadcasting system comprising:

a center equipment, including

a broadcasting equipment for transmitting broadcast signals on a transmission line, and

a controller for transmitting command signals for controlling distribution of the broadcast signals to broadcast signal receiving terminals, and

at least one receiving district, each receiving district including

a plurality of tap devices connected from the transmission line for distributing the broadcast signals from the transmission line to the broadcast signal receiving terminals, and

a district power supply connected from a power source and providing a power signal through the transmission line to the tap devices of the receiving district, whereinthe command signals are separate and independent from the power signal,

each tap device including

at least one switchable tap path for distributing the broadcast signal from the transmission line to corresponding broadcast signal receiving terminals,

at least one control relay in each tap path for controlling connection of the tap path to the broadcast signal receiving terminal,

a tap control connected from the transmission line and responsive to the command signals for controlling the control relays according to the command signals, and

a tap device power supply connected from the power signal on the transmission line and providing power to the tap device, wherein

in a sequence of command signals transmitted by the center equipment controller to control the control relays of a plurality of tap paths,

the center equipment controller will transmit a command signal to tap device in a receiving district only after a predetermined time interval after a transmission of a preceding command signal to a tap device in the receiving district wherein the predetermined time interval is at least a time required to complete a tap device switching operation in the receiving district,

05/18/2004 2:43 PM

09/473,080

thereby limiting the tap device switching operations concurrently executing in the receiving district such that a power demand to the district power supply due to the tap device switching operations will remain below a predetermined limit.

[successive command signals are transmitted to different receiving districts, wherein the controller of the central equipment

transmits a command signal to a receiving district having at least one tap device to which a command signal is to be transmitted,

transmits a command signal to a receiving district which has not received a command signal in a proceeding transmission of a command signal and which has at least one tap device to which a command signal is to be transmitted, and

repeats the transmission of command signals as necessary to provide at least one command signal to each tap device which is to receive a command signal.]

5. (PREVIOUSLY PRESENTED) The cable broadcasting system of claim 4, wherein:

the center equipment controller will transmit a command signal to a tap device in a receiving district only after an operating time required for a tap device in the receiving district to complete execution of a preceding command signal has elapsed.

6. (PREVIOUSLY PRESENTED) The cable broadcasting system of claim 4, wherein a tap device further includes:

a directional coupler connected from the transmission line for branching connection of the broadcast signal from the transmission line to each of the tap paths, wherein

the at least one control relay of each tap path is controllable through the tap control and by the command signals to switchably connect the tap path into one of an on state and an off state to the corresponding broadcast signal receiving terminal according to the command signals.

7. (PREVIOUSLY PRESENTED) The cable broadcasting system of claim 4, wherein a tap device further includes:

a plurality of switchable tap paths,

a directional coupler connected from the transmission line for branching connection of the broadcast signal from the transmission line to each of the tap paths, wherein

9/18/04 4:24 PM

09/473,080

the at least one control relay of each tap path is controllable through the tap control and by the command signals to switchably connect the tap path into one of an on state and an off state to the corresponding broadcast signal receiving terminal according to the command signals, and wherein

when the tap control controls the control relays of a plurality of tap paths of a tap device, the tap control controls each control relay to switchably connect each tap path into one of an on state and an off state in an order.

8. (NEW) The cable broadcasting system of claim 4, wherein:

the center equipment controller transmits a command signal to tap device in a receiving district only after a predetermined time interval after a transmission of a preceding command signal by transmitting each successive command signal to a different district.

05/18/2004 4:17 PM